

Notice of Allowability

Application No.

09/068,270

Examiner

James M. Mitchell

Applicant(s)

UCHIYAMA, KENJI

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/14/2004.
2. ☒ The allowed claim(s) is/are 1,2 and 4-27.
3. ☒ The drawings filed on 01 May 1998 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Response to Amendment/ Arguments

In applicant's remarks it stated that examiner indicated that applicant's amendment would put the application in condition for allowance. Applicant has misstated examiner's position, which was that the amendment would appear to overcome the cited art. Nevertheless, applicant was called in effort to distinguish applicant's novelty. Applicant agreed to the amendment as followed below. As such, finality of the rejection of the last Office action has been withdrawn, prosecution reopened and the application placed in condition for allowance.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Brian Wade on June 28, 2004.

The application has been amended as follows:

Claims

In claims 1, 5 and 8 Line 6, after "spaces" insert - - substantially free from solids and liquids, - -;

Art Unit: 2827

In claims 9, 11 and 19, Line 10, after "spaces" insert - - substantially free from solids and liquids, - -;

In claim 17, Line 13, after "spaces" insert - - substantially free from solids and liquids, - -

In claims 18 and 20, Line 8, after "spaces" insert - - substantially free from solids and liquids, - -;

In claims 22, 23 and 27, Line 11, after "spaces" insert - - substantially free from solids and liquids, - -;

In claims 18 and 20, Line 8, after "spaces" insert - - substantially free from solids and liquids, - -;

In claim 24, Line 6, after "spaces" insert - - substantially free from solids and liquids, - -;

In claim 26, Line 9, after "spaces" insert - - substantially free from solids and liquids, - -.

Allowable Subject Matter

Claims 1,2 and 4-24 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the prior art does not disclose or make obvious a semiconductor device

connecting structure or method comprising a bonding layer including a plurality of spaces substantially free from solids and liquids, spanning from a device to a substrate, wherein the spaces change shape in response to deformation of at least one substrate and device including all the limitations of the independent claims.

Conclusion

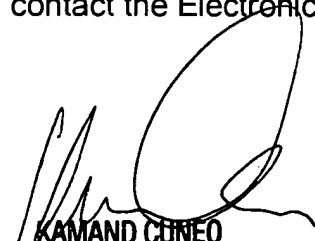
Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Mitchell whose telephone number is (571) 272-1931. The examiner can normally be reached on M-F 10:30-8:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jmm



KAMAND CUNEO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800